



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,974

12/14/2005

Shigeki Ueda

NGB-39208

9587

53054

7590

09/16/2010

PEARNE & GORDON LLP

1801 EAST 9TH STREET

SUITE 1200

CLEVELAND, OH 44114-3108

EXAMINER

YOUNKINS, KAREN L

ART UNIT

PAPER NUMBER

3751

NOTIFICATION DATE

DELIVERY MODE

09/16/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@peame.com

dchervenak@peame.com

Office Action Summary

Application No.

10/560,974

Applicant(s)

UEDA ET AL.

Examiner

KAREN YOUNKINS

Art Unit

3751

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 6/28/2010

DETAILED ACTION

Response to Amendment

1. This action is responsive to the amendment and IDS dated 6/28/2010. Claims 1-26 have been canceled by way of the amendment, and new claims 27-36 have been added.

Specification

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Drawings

3. Figures 10, and 38 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 27-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
7. Regarding Claim 27, the language "pressing means made of elastic member" renders the claim indefinite. It is unclear what the pressing means is made of, as the term 'elastic member' is not known in the art to be indicative of a certain material or structure, and the elastic member described in the specification is not discussed as making the pressing means.
8. Further regarding Claim 27, the language "a vibration detecting sensor of a piezoelectric sensor" suggests two distinct sensors. However, the specification only sets forth one sensor – the piezoelectric sensor/vibration detecting sensor shown in the drawings at 9. For the purposes of examination, the examiner assumes the applicant intends to claim one vibration detecting/piezoelectric sensor as supported by the specification and drawings.
9. Claim 27 currently requires a projection and a pressing means, however the specification described the projections as being the pressing means. For example pp[0043] states:

"the pressing means is constituted by a projection projected from an inner face of the case to the piezoelectric sensor in the cord-like shape arranged in the case."

Clarification is requested.

10. Claim 27 recites the limitations "acceleration of vibrations" and "of user" in page 9. There is insufficient antecedent basis for these limitations in the claim.

11. Regarding Claim 28, the language “and wherein a vibration detecting apparatus determines motion information...” renders the claim indefinite. PP [0023] of the applicant’s specification reads:

[0023] Further, the vibration detecting apparatus of the invention is constructed by a constitution arranging a vibration detecting sensor to a case comprising an upper lid and a base plate, the upper lid comprising a rigid body, and including amplifying means for amplifying the vibration transmitted to the rigid body and the vibration detecting sensor for detecting the amplified vibration.

Thus, the vibration detecting apparatus disclosed in the specification includes the sensor and amplifying means. It is not a separate component of the invention, as suggested by Claim 28. Further, the ‘vibration detecting apparatus’ is shown to include these components in figures 12(a)-(c). Clarification is requested.

12. Regarding Claim 34, it is the examiner’s understanding that the specification sets forth the pad and projection are one in the same, as discussed in pp [0102] and shown in figure 4. However, claim 34 indicates the pad and projection are separate. Clarification is requested.

13. Regarding Claim 35, the language “projections that alternately project from the upper lid and the base plate” is unclear. The examiner is unaware of what ‘alternately project’ means, and the language is not used in the specification. Further regarding Claim 35, it is unclear what the relationship between the projection in claim 27 and the projections of claim 35 is. It is the examiner’s understanding from the specification and drawings that they are the same, but the claims currently set forth they are different.

14. In light of the above and the objection to the specification, the claims are examined as best understood by the examiner.

Claim Rejections - 35 USC § 103

15. Claims 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the English Translation of JP 2985645 (submitted by the applicant on 10/30/2009, and known hereafter as '645) in view of USPN 5,902,255 to Origno and USPN 5,860,169 to Machanic.

16. Regarding Claims 27 and 30, '645 teaches a 'case' comprising an upper lid made of a rigid body to the extent claimed and a base plate made of a rigid body to the extent claimed, for example see figures 7 and 11. The case is rigid enough to support the weight of a user when sitting on the case. Pressing means/projections are provided as claimed see pp [0011]. Pressing means/projections are attached to the upper lid and base plate. The pressing means is elastic in so much as the pressing means of instant invention is elastic, see pp [0011] for discussion. Due to the nature of the pressing means moving and being compressed during normal use of the device. When a user sits on the seat, the pressing means/projections/pads are brought into 'elastic' contact with an upper face of a toilet main body (as the system is on a toilet seat/body). A vibration detecting sensor 'of a piezoelectric sensor' (piezoelectric element 1) in a 'cord-like' shape is located between the projection/pressing means. The vibration has an acceleration (it is noted that all vibrations have an inherent acceleration value because they are moving), and the piezoelectric sensor outputs an electric signal in accordance with the acceleration. After the vibration is initiated/applied by the user, see pp [0009] of the detailed description. Seating is detected as the vibration occurs as a result of a user sitting on the device.

'645 fails to show arranged in toilet seat, and further fails to show a pad attached to a lower face of the base plate that contacts an upper face of a toilet main body and that absorbs impact between the base plate and the toilet main body.

Origino teaches a similar vibration detecting apparatus disposed on a toilet seat, see column 3 lines 15-16.

Machanic teaches the use of pads 34 to help absorb impact between the bottom of a toilet seat and the main body of a toilet.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the vibration detecting device of '645 in a toilet seat to detect a toilet user as taught by Origino. It would have been further obvious to have provided pads as taught by Machanic to help absorb impact between the bottom of the toilet seat (at the base plate) and a toilet main body. These pads will help prevent breaking of the toilet seat under pressure of the weight of a user.

17. Regarding Claim 31, as previously discussed in pp-16, further '645 teaches the electric signal being used to control a temperature of the seat, see pp [0029] of the detailed description. It would have been obvious to one having ordinary skill in the art to have made the electric signal control the temperature of the toilet seat through a toilet seat heater or the like as the human body detector of '645' has been modified to be in a toilet seat as taught by Origino.

18. Regarding Claim 36, the projection and pressing means of '645 as modified in pp-16 above are located above the pad (as they are in the case and the pad is below the case) when the pad is in contact with the upper face of the toilet main body (when in use).

19. Regarding Claims 28-29, as previously discussed in pp-16 above, further the vibration detecting sensor is flexible, see pp [0011] of the detailed description. The vibration detecting apparatus determines motion information as a user moved on or off the seat based on an output of the piezoelectric sensor and determines biologic information (for example, if a user is on the

seat) after determining the motion information. See pp [0029] of the detailed description. The apparatus further comprises controlling means 18/19.

20. Regarding Claim 32, as previously discussed in pp-17 above, further '635 teaches the electric signal is outputted to control a variety of temperatures and settings. The examiner takes official notice that it would have been obvious to one having ordinary skill in the art to have output the electric signal to a monitor outside of the toilet seat in order to control said variety of temperatures and settings.

21. Regarding Claim 35, as previously discussed in pp-16 above, the piezoelectric sensor is 'supported in a state' of being separated from the inner face of the case (they are not integrally formed so they are separated) and the toilet seat apparatus comprises a plurality of projections that project from the upper lid and the base plate. These projections run along the apparatus.

22. Regarding Claim 34, as previously discussed in pp-16 above, Machanic teaches the pad extending through the base of a toilet seat via a through hole to connect the base to another portion of Machanic's device, see figure 4(a). Therefore, it would have been obvious to one having ordinary skill in the art to have connected the pad to the projection through the through hole and into the case/toilet seat to connect the pad to the reminder of the toilet seat device.

23. Regarding Claim 33, as previously discussed in pp-16 above, further the piezoelectric sensor in the cord-like shape is attached to one of the upper lid and the base plate. The pressing means transmits amplified vibration via the amplifying means 2 from the toilet seat to the piezoelectric sensor by contacting the piezoelectric sensor.

Response to Arguments

24. Applicant's arguments filed 6/28/2010 have been fully considered but they are not persuasive.
25. Regarding the references cited in an IDS dated December 14th, 2005, the examiner would like to thank the applicant for submitting the cited references and they have now been considered. A copy of the IDS dated 6/28/2010 is attached to this action.
26. Regarding the specification, the applicant has asserted that the specification is in proper idiomatic English and that a substitute specification has not been submitted. The examiner appreciates the amendments to the specification dated 6/28/2010 but still requires a substitute specification as discussed above. The examiner respectfully disagrees that the specification is in proper idiomatic English and one of ordinary skill in the art would not be able to understand the specification in the current form.
27. Claims 1-26 have been cancelled, and new claims 27-36 are addressed in the rejections above.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN YOUNKINS whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Y./
Examiner, Art Unit 3751
/Gregory L. Huson/

Supervisory Patent Examiner, Art Unit 3751